respondents (of 53,524 total) using 1–2 (n = 6,434), 3–4 (5,529), or 5+ (5,727) prescription medications for symptomatic conditions. Adherence was higher among those who saw a GP in the past 6 months ($M = 1.19$, $SD = 1.24$, $n = 14,802$) vs. those who did not ($M = 1.36$, $SD = 1.29$, $n = 2,888$), $P < 0.001$, and higher among those with a higher number of prescriptions (for 5+, 3–4, and 1–2: Ms = 0.99, 1.26, and 1.38; SDs = 1.18, 1.26, and 1.27, respectively), $P < 0.001$. Hospitalizations were lower among GP visitors ($M = 0.30$, $SD = 2.39$) than non-visitors ($M = 0.34$, $SD = 2.07$), $P < 0.001$, ER visits were lower among GP visitors ($M = 0.32$, $SD = 1.20$) than non-visitors ($M = 0.33$, $SD = 2.09$), $P < 0.001$, and both were significantly higher among those with more prescriptions, ps < 0.001. The benefits of a GP were largely independent of number of medications. **CONCLUSIONS:** Among European patients taking prescriptions, visiting a GP was associated with greater adherence and lower health care resource utilization.

PIH28

WHY DO PATIENTS NOT ADHERE TO PRESCRIBED MEDICATION REGIMES? RESULTS OF TWO GERMAN SURVEYS

Wilke T[1], Mueller S[2]
[1]Institute for Pharmacoeconomics and Drug Logistics, University of Wismar, Wismar, Germany; [2]University of Wismar, Wismar, Germany

OBJECTIVES: The aim of this study is to answer the following questions: 1) How high is the self-reported nonadherence (NA) of German patients with the need to regularly take medication? and 2) Which factors capable of explaining this self-reported NA can be identified by multivariate analysis? **METHODS:** Two cross-sectional surveys (phone survey with 1177 patients; face-to-face in-depth survey with 340 patients in 17 German pharmacies) were conducted. Self-reported NA was measured by the generic Morisky scale (either as 4 items or 8 item MMAS). Identification of explanatory factors was conducted on the basis of multivariate logistic regression analysis (including the calculation of additive risks by dichotomization of significant explanatory factors). **RESULTS:** 1) Approximately 35–40 % of the patients can be described as non-adherent (38.8 %/35.3 %); 2a) Survey 1: Only a few socio-demographic factors are able to explain the NA (chronic disease, some aspects of age, and low number of required medications to take); and 2b) Survey 2: Most results of the first survey can be replicated. However, intentional NA explanations have considerably more influence: positive medication belief, a positive mood, and a good patient-doctor relationship reduce the NA risk. Furthermore, patients who are easily able to recognize the correct medication on the basis of the identification of the packaging have a significantly reduced NA probability. When additive risk is considered, patients who are chronically ill but display no other risk factors have an NA probability rate of 10.4 %, for patients displaying all identified risk factors this rate increases to 93.9 %. **CONCLUSIONS:** Our surveys are the largest and most detailed to have been conducted in Germany concerned with the theme of medication-based NA. Our results show that approximately one-third of patients can be classified as non-adherent. Intentional NA factors explain the NA considerably better than do socio-economic factors.

PIH29

RETROSPECTIVE EVALUATION OF THE IMPACT OF COST-SHARE INCREASES FOR SPECIALTY MEDICATIONS ON ADHERENCE AND PERSISTENCE

Kim YA[1], Prasla K[2], Rascati K[3], Goel NS[2], Dunlop D[4], Knisely E[4], Godley PJ[2]
[1]The University of Texas at Austin, Austin, TX, USA; [2]Scott & White Health Plan, Temple, TX, USA; [3]University of Texas, College of Pharmacy, Austin, TX, USA; [4]Novartis Pharmaceuticals Corporation, East Hanover, NJ, USA

OBJECTIVES: A regional health plan implemented a specialty pharmacy benefit with increased copayment/coinsurance for specialty medications. Our objective was to measure and compare the change in adherence and persistence after implementation of the specialty benefit. **METHODS:** Pharmacy claims for patients who chronically used anti-inflammatory, immunosuppressant, cancer, and multiple sclerosis medications were assessed. The intervention group consisted of those whose out-of-pocket cost-share for specialty medications increased by at least $25 (per 30-day fill), and the control group consisted of those whose out-of-pocket amounts did not change. Adherence, defined by proportion of days covered (PDC), was measured every 3 months for 12 months before and after the copay change. Paired t-tests compared the adherence in the pre- vs. post-periods. Individual growth model analysis evaluated the changes in adherence throughout the time periods. Cox regression analysis determined the difference in persistence between groups after the copay change, controlling for age, gender, copay level, group, and pre-period persistence. **RESULTS:** There were 237 patients in the intervention group and 211 patients in the control group. The PDC results varied by drug type; adherence decreased after the copay change in the intervention group for patients on anti-inflammatory, immunosuppressant, and multiple sclerosis medications, but remained consistent for patients on antineoplastics. The growth model showed a small, but statistically significant decrease in PDC of 0.01 after copay changes ($P = 0.014$). The Cox regression analysis indicated that the estimated risk of discontinuing therapy increased for patients in the intervention vs. control groups (hazard ratio = 2.35, 95% CI: 1.43–3.58). **CONCLUSIONS:** The move to the specialty pharmacy benefit allows for closer scrutiny of specialty utilization by pharmacists who actively monitor utilization and access. Despite the minimal adherence decrease and significant persistence changes, the results indicated relatively more stability with the use of specialty medications than that reported with copayment/coinsurance increases for traditional pharmaceutics.

PIH30

PERSISTENCE TO POSTMENOPAUSAL OSTEOPOROSIS (PMO) TREATMENTS IN A REGION OF SPAIN

Sicras-Mainar A[1], Navarro-Artieda R[2], Gutierrez L[3], Sorio F[3], Intorcia M[3]
[1]Directorate of Planning, Badalona Serveis Assistencials, Badalona, Barcelona, Spain; [2]Hospital Universitari Germans Trias i Pujol, Barcelona, Spain; [3]Health Economics Department, Amgen S.A, Spain

OBJECTIVES: Women with PMO are most often treated with bisphosphonates (BPs), as well as with strontium ranelate (SR) and raloxifene (RLX). However, a high percentage of patients are not persistent after 1 year of therapy, which can compromise treatment effectiveness (Imaz I, Osteoporos Int 2010) and thus increase the risk of fractures. The objective was to estimate the persistence to PMO treatments in a region of Spain (Catalonia) representative of the Spanish population. **METHODS:** This database analysis included women with PMO from 6 primary care centers, aged ≥50 years who initiated BPs (alendronate, ibandronate, risedronate), SR or RLX between January 1, 2004 and June 30, 2008. Patients with cancer, other bone diseases, hospitalization >30 days or <1 year follow-up data were excluded. Persistence was measured at 1, 2 or 3 years according to prescriptions dispensed at office-based pharmacies. Three patients' cohorts were analyzed: patients with ≥1 year (cohort 1), ≥2 years (cohort 2) and ≥3 years (cohort 3) follow-up. Patients with no access to medication for >1 month were considered non-persistent and a switch to another PMO treatment was considered a discontinuation. In a secondary analysis, switch was not considered a discontinuation. Statistics were performed using Kaplan-Meier methodology. **RESULTS:** A total of 3,049 patients (mean age ± SD; 68.3 ± 9.7 years) were included in cohort 1; 30% were persistent after 1 year (95%CI:27.5–32.5). In cohort 2 (n = 2698; 68.9 ± 9.3 years) persistence was 35% (CI:32.6–36.2) and 16% (CI:13.6–19.2) after 1 and 2 years respectively. In cohort 3 (n = 2163; 68.4 ± 9.5 years) persistence was 36% (CI:33.9–37.9), 20% (CI:18.3–21.7) and 9% (CI:5.9–12.1) after 1, 2 and 3 years, respectively. The results were similar by drug and frequency of administration, and also when switch was not considered a discontinuation. **CONCLUSIONS:** In this Spanish population of postmenopausal women with osteoporosis, persistence to treatment was poor, even when a switch was not considered a discontinuation.

PIH31

STATIC AND DYNAMIC BALANCE EXAMINATION ON STABILOMETER DURING PREGNANCY

Hock M, Pálfi T, Kránicz J, Kriszbacher I, Boncz I, Bódis J
University of Pécs, Pécs, Hungary

OBJECTIVES: Our study focused on revealing difficulties in maintaining balance during pregnancy. **METHODS:** Balance testing was performed on 150 volunteers (50 healthy pregnant, 50 pathologically pregnant, 50 healthy young non—pregnant women). One hundred pregnant women were allocated into 4 subgroups based on physical activity performed prior to and during pregnancy. During stabilometer measurements static balance was examined with Romberg test while dynamic balance with 5 programs on a stabilometer. Statistical data were calculated according to mean, standard deviation and T-test while the results were considered to be relevant at $P < 0,05$. **RESULTS:** Average results of Romberg test were worse in groups of pregnant women compared to non-pregnant women although the difference was not significant. Concerning the subgroups: those who had previously been involved in professional sports and were healthy and physically active during pregnancy performed better on the open–eye test ($P < 0,05$) compared to pathologically pregnant patients. Between the second and third trimesters of healthy pregnancies no significant results were found in Romberg test while a significant difference was detected ($P < 0,05$) in the performance of the 5th exercise of the dynamic balance test. Regarding the 5 programs on the stabilometer examining dynamic balance non-pregnant women performed all exercises significantly better ($P < 0,05$) than healthy pregnant women. However when compared to pathologically pregnant women apart from the exercises No.2 the result showed a significant difference ($P < 0,05$). Concerning the same exercises healthy pregnant women performed significantly better ($P < 0,05$) in exercises No.1 and No.4. Pregnant women who had previously been and remained physically active during pregnancy performed the exercise of moving the centre of body weight in a significantly shorter time than those who were inactive and hospitalised. **CONCLUSIONS:** Statistical analysis of data proves that physical activity (especially professional sports) prior to becoming pregnant and physical activity during pregnancy have positive effects.

PIH32

TREATMENTS TO PREVENT PROSTATE CANCER AND THEIR IMPACT ON HEALTH RELATED QUALITY OF LIFE

Lloyd A[1], Kerr C[1], Rowen D[2], Maslen T[3], Brazier J[2]
[1]Oxford Outcomes Ltd, Oxford, UK; [2]University of Sheffield, Sheffield, UK; [3]GlaxoSmithKline UK Ltd, Uxbridge, UK

OBJECTIVES: Treatments to prevent prostate cancer are associated with side effects and the impact of these on health related quality of life (HRQL) should be considered in any assessment of cost-effectiveness. However our systematic review identified a lack of robust data. a prospective assessment of the impact of side effects was undertaken using generic and condition-specific measures of HRQL. **METHODS:** Participants were recruited from an online panel. Men over 55, with either erectile dysfunction (ED), loss of libido, gynecomastia or ejaculatory disorders (without other chronic disease such as renal failure, diabetes, multiple sclerosis etc), and an age matched control group completed assessments of symptom severity and HRQL (EQ-5D and Sexual QoL survey—SQoL-3D). Both HRQL measures can provide